

**670.1 DESCRIPTION**

This work consists of furnishing materials and the construction of drop inlets.

**670.2 MATERIALS**

- A. Concrete:** Concrete shall conform to Class M6 (I28), Section 462.
- B. Castings:** Unless otherwise specified, frames and grates shall consist of approved gray iron castings meeting the requirements of AASHTO M 105, Class 35 (241). Grates shall fit the frames with which they are to be used. Inaccuracies of bearing shall be corrected by machining before use or replaced with new assemblies.
- C. Steel Reinforcement:** Steel reinforcement shall conform to Section 1010.
- D. Mortar:** Mortar shall consist of one part Portland cement and two parts mortar sand conforming to Sections 750 and 810 respectively. As an alternate, a commercially available grout conforming to Section 460.3.S may be used.
- E. Curing Compound:** Curing compound shall conform to Section 821.

**670.3 CONSTRUCTION REQUIREMENTS**

Concrete for drop inlets shall be proportioned, mixed, hauled, and placed in accordance with Section 462.

Precast drop inlets shall conform to Section 560.

When the foundation for a drop inlet is in new embankment, the embankment shall be constructed to an elevation at least one foot (300 mm) above the footing before the foundation for the drop inlet is prepared. The foundation shall be compacted as specified for the adjacent embankment.

The foundation excavated for drop inlets shall be thoroughly moistened immediately prior to placing concrete.

Steel reinforcement shall be placed in accordance with Section 480.

Castings shall be set in full mortar beds or secured as specified. Castings shall be set accurately to the correct elevation so subsequent adjustment will not be necessary.

Inlet and outlet pipe connections shall be of the same size and kind and shall meet the same requirements as the pipe they connect. Pipe sections shall be flush on the inside of the structure wall and project outside sufficiently for proper connection with the next pipe section. Masonry shall fit neatly and tightly around the pipe.

The finished surface of the concrete shall present a neat and smooth appearance. Concrete shall be protected and cured in accordance with Section 460.3, except the minimum curing time shall be 72 hours.

Upon completion and curing of the unit, the sheeting, bracing, forms, and falsework shall be removed and the excavation backfilled. The unit shall not be backfilled until the completion of the 72 hour curing period, or until the concrete reaches a minimum compressive strength of 3000 psi (21 MPa). Backfill shall be placed in layers not exceeding six inches (150 mm) thick and compacted to the same degree as specified for the adjacent embankment. Installations shall be finished and left in a neat appearing condition.

#### 670.4 METHOD OF MEASUREMENT

Drop inlets will be measured per each, or when specified, the materials for drop inlets will be measured under the following items:

- A. Cast Iron Frames with Grates:** Drop inlet cast iron frames with grates will be measured as units.
- B. Concrete:** Class M6 (I28) concrete will be measured in accordance with Section 462.
- C. Reinforcing Steel:** Reinforcing steel will be measured in accordance with Section 480.

#### 670.5 BASIS OF PAYMENT

When payment for drop inlets is made per each, payment will be full compensation for furnishing cast iron frames and grates, concrete, reinforcing steel, labor, equipment, and incidentals necessary.

When payment for drop inlets is not made per each, the various items will be paid for as follows:

- A. Cast Iron Frames with Grates:** Drop inlet cast iron frames with grates will be paid for at the contract unit price each. Payment will be full compensation for furnishing and installing the cast iron frame and grate as a unit, inclusive of the required mortar bed.
- B. Concrete:** Concrete will be paid for as Class M6 (I28) concrete, in accordance with Section 462. Payment will be full compensation for excavation required to furnish the drop inlet.
- C. Reinforcing Steel:** Reinforcing steel will be paid for in accordance with Section 480.5.